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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/995,880	11/28/2001	Thomas A. Koes	50884	1611
21874	7590	12/14/2006		
EDWARDS & ANGELL, LLP P.O. BOX 55874 BOSTON, MA 02205			EXAMINER LEE, SIN J	
			ART UNIT	PAPER NUMBER

1752

DATE MAILED: 12/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/995,880	<b>Applicant(s)</b> KOES, THOMAS A.	
	<b>Examiner</b> Sin J. Lee	<b>Art Unit</b> 1752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,6-12,17 and 18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 6-12, 17, 18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. Claims 2-5, 13-16, 19 and 20 are cancelled claims.
2. In view of the amendment of August 2, 2006, previous 102(e) rejection and 103(a) rejection over Imai et al'025 are hereby withdrawn.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 6, 10-12, 17 and 18 rejected under 35 U.S.C. 102(b) as being anticipated by Fanger et al (4,221,859).

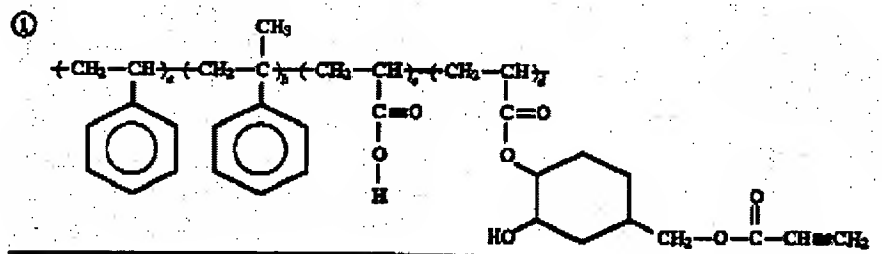
In Example IV, Fanger teaches a photopolymerizable composition containing 100 parts polyvinyl acetate emulsion having 55 % solids (which means 55 *parts* of polyvinyl acetate in solids), 4.8 *parts* of polyvinyl alcohol, N,N'-methylene bisacrylamide, dimethyl-2-hydroxypropylamine methacrylimide, pyrazolone dye and 0.8 *parts* of oxalic acid (as photoinitiator). Therefore, Fanger's composition contains 0.54 parts of oxalic acid per 40 parts of polymeric binder on a dry weight basis. Since Fanger uses oxalic acid as a photoinitiator, Fanger also teaches present photoactive component (in present claim language, it is not required that present photoactive component is a separate component from present organic acid). In Example IV, Fanger's composition is coated on a grained aluminum plate (Fanger also teaches copper substrate in col.5, line 20) and then dried. The dried film is exposed to UV light and then placed in a water spray

which washes away the unexposed areas, thus producing a fine relief image.

Therefore, Fanger teaches present inventions of claims 1, 6, 10-12, 17 and 18.

5. Claims 1, 6-12, 17 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Urano et al (5,800,952).

In Comparative Examples 6 and 9 (see Table 2, and see also the last three lines of col.15-16, first fifteen lines of col.17-18, and col.4, lines 15-17, col.16, lines 48-58), Urano teaches a photopolymerizable composition containing a photopolymerization initiator system II including R-1 (2,2'-bis(o-chlorophenyl)-4,4',5,5'-tetraphenylbiimidazole), an ethylenic compound, 24 parts of an organic polymer material (1) (with acid value of 80) which is shown below, and 3 parts of an additive which is one of oxalic acid and phthalic acid:



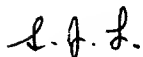
Therefore, Urano teaches present 5 parts of the organic acid per 40 parts of polymeric binder. Urano coats his composition onto a substrate, followed by exposure and development. Thus, Urano teaches present inventions of claims 1, 6-12, 17 and 18.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sin J. Lee whose telephone number is 571-272-1333. The examiner can normally be reached on Monday-Friday from 9:00 am EST to 5:30 pm EST.

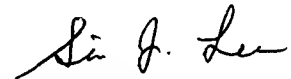
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly, can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



S. Lee  
December 10, 2006



**SIN LEE**  
**PRIMARY EXAMINER**